

# NATURAL RESOURCES CONSERVATION SERVICE

## NEVADA CONSERVATION PRACTICE STANDARD

### FOREST SITE PREPARATION

(Acre)

CODE 490

#### DEFINITION

Treating areas to encourage natural regeneration of desirable trees and shrubs or to permit artificial regeneration by planting or direct seeding.

#### PURPOSE

To prepare land for establishing a stand of desirable woody vegetation by controlling undesirable vegetation, removing slash and debris, or altering site conditions.

#### CONDITIONS WHERE PRACTICE APPLIES

In understocked areas, in areas where a land cover change to forest is desired, or in areas having undesirable vegetation that inhibits or competes with preferred woody species.

#### CRITERIA

This method, intensity and timing of site preparation will match the limitations of the site, safety, and equipment and the requirements of the regeneration species.

An appropriate site preparation method will be chosen to protect any desirable vegetation in understocked areas.

Remaining slash and debris shall not create habitat for or harbor harmful levels of pests.

Remaining slash and debris shall not hinder needed equipment operations or create undue fire hazard.

Accelerated erosion and/or runoff from site preparation will be controlled by supporting practices.

Comply with applicable laws and regulations, including the state's Best Management Practices (BMPs).

#### CONSIDERATIONS

The chosen method should be cost effective and protect cultural resources, wildlife habitat, springs, seeps, wetlands and other unique areas.

#### Planning Considerations

Adequate seed source must be present. If not, consider tree planting or direct seeding.

Seed crops of tree species are sporadic. The quality of the seed crop will have to be determined by observation in the field.

Scarify in the early fall of a good seed year if natural reproduction is to be relied upon to secure stocking.

Use the practice only on the better soils where topography and erosion hazard permit.

Be certain that openings are not a result of restrictive, shallow soils, or of other conditions such as wetness.

Wildlife should be recognized as a limiting factor in restocking some areas.

#### Additional criteria for encouraging natural regeneration

Forest site preparation is commonly but one component of a comprehensive silvicultural system that treats a site over the long term. The negative effects caused by site preparation activities can be ameliorated by selection of an appropriate harvesting method.

Evaluate the site fully when planning for regeneration. An ecosystem approach is best which considers:

- Soil Properties
- Microclimate Properties
- Potential Animal Damage
- Potential Insect/Disease Damage

Survival of advanced regeneration requires careful planning and should be considered as part of an overall silvicultural prescription.

Depending upon the objective, tree establishment by natural regeneration has distinct advantages over other methods. Initial costs are low, and a source of site-adapted seed or planting stock is readily available. This method is often integrated into a comprehensive forest plan because the degree of success is dependent upon the method used for harvest or overstory removal.

Natural regeneration of lodgepole pine (*Pinus contorta*) may require fire due to the serotinous habit of its cones.

It is important to remember that natural regeneration is easy only if the desired species mix and timing of establishment are unimportant.

It is NRCS policy to complement and not duplicate the work of State forestry agencies. If a State-employed forester has prepared a forest management plan, the NRCS will coordinate its technical assistance with the State.

The Nevada Forest Practice Act must be observed through a timber harvest plan approved by the Nevada Division of Forestry.

- Nevada Revised Statute 548.042 establishes the requirement for a logging permit prior to any logging or cutting operation.
- Logging or cutting operations include the cutting and/or removal of timber or other solid wood forest products, including Christmas trees and firewood from timberlands for commercial purposes. This includes all incidental practices like construction and maintenance of roads,

fuelbreaks, landings, stream crossings and so on.

- Administrative regulation 548.043 establishes the requirement of a logging plan as part of the prerequisites for the issuance of a logging permit.

NRCS personnel will evaluate the need for a logging permit while assisting landowners with planning NRCS forest practices. NRCS forest practices will not be applied if a logging permit is required but not obtained.

Depending upon the silvicultural method, a comprehensive treatment of a forest stand will consider the following practices:

- FOREST HARVEST TRAILS & LANDINGS (Code 655)
- FOREST STAND IMPROVEMENT (Code 666)
- FOREST STAND PREPARATION (Code 490)
- TREE/SHRUB ESTABLISHMENT (Code 612)

Include additional practices that will help minimize soil erosion and give maximum watershed protection, such as FIREBREAK (Code 394) and BRUSH MANAGEMENT (Code 314).

## PLANS AND SPECIFICATIONS

Specifications for applying this practice shall be prepared for each site and recorded using approved specification sheets, job sheets, narrative statements in the conservation plan, or other acceptable documentation.

### Specifications Guide

Plans and specifications will address species; method of preparation; and protection required for seed, seedlings, or cuttings; and protection of the site.

Specify:

- objective
- location and size (acres) of treatment area
- pre-treatment site inventory
- target tree species

- site preparation method
- reproduction method
- references to supporting practices

## OPERATION AND MAINTENANCE

Operation and maintenance requirements are not applicable for this practice.

## REFERENCES

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Sierra Nevada Ecosystem Project, Final Report to Congress, vol. II, Assessments and Scientific Basis for Management Options (Davis: University of California, Centers for Water and Wildland Resources, 1996).

Smith, D.M., Hawley, R.C., 1962. The Practice of Silviculture. John Wiley & Sons, Inc., New York.

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State of Nevada. 1994. Handbook of Best Management Practices, Appendix H-1, Amended Forest Practice Rules.

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